United States Environmental Protection Agency
Washington, D.C. 20460
Water Compliance Inspection Report

Section A: National Data System Coding (i.e. PCS)

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	FacType
1 N 2	3 DC0000248 11	12 18/08/03 17	18 C	19 S	20 2

Remarks
21 _____ 66

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	B1	QA	-------Reserved-------
67 10 69	70 2	71 N	72 N	73 ___ 74 75 _____ 80

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*	Entry Time/Date	Permit Effective Date
The John F. Kennedy Center for the Performing Arts 2700 F Street, N.W. Washington, DC 20566	10:15 AM 03 Aug 2018	06 June 2013
	Exit Time/Date 12:00 PM 03 Aug 2018	**Permit Expiration Date** 05 June 2018[1]

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)	Other Facility Data (e.g., ISC NAICS, and other descriptive information)
Rodney Cherry, Director of Facility Services Alex Mensah, Mechanic	
Name, Address of Responsible Official/Title/Phone and Fax Number Rodney Cherry, Director of Facility Services (202) 416-7933	**Contacted** ☒ Yes ☐ No

Section C: Areas Evaluated During Inspection (Check only those areas evaluated)

☒ Permit	☒ Self-Monitoring Program	☐ Pretreatment	☐ MS4
☒ Records/Reports	☒ Compliance Schedules	☒ Pollution Prevention	
☒ Facility Site Review	☐ Laboratory	☐ Stormwater	
☒ Effluent/Receiving Waters	☒ Operations & Maintenance	☐ Combined Sewer Overflow	
☒ Flow Measurement	☒ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments
(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description		
A0012	Numeric Effluent Violations (9)	E0011	Late Submittal of DMRs (8)
C0017	Analysis Not Conducted	B0020	Improper Operation and Maintenance
B0020	Improper Operations and Maintenance		

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Numbers	Date
Robert Burnett	Department of Energy and the Environment Inspection and Enforcement Division – 202.535.1725	10.04.2018
Isaac Kelley	Department of Energy and the Environment Inspection and Enforcement Division – 202.535.2691	10.04.2018
Signature of Management Q/A Reviewer Joshua Rodriguez	Department of Energy and the Environment Inspection and Enforcement Division – 202.535.1025	10.12.18

Comments
1. The facility applied for a new permit within the allotted time. The permit is currently administratively continued.

	PERMIT NO. DC0000248		
SECTIONS F THRU L: COMPLETE ON ALL INSPECTIONS, AS APPROPRIATE. N/A = NOT APPLICABLE			
SECTION F: FACILITY AND PERMIT BACKGROUND			
ADDRESS OF PERMITTEE IF DIFFERENT FROM FACILITY (Including City, County and ZIP code)	**DATE OF LAST PREVIOUS INVESTIGATION BY EPA/STATE** July 5 2016		
	FINDINGS A0012 (10) Numeric Effluent Violation(s) B0020 Improper Operation and Maintenance C0011 Failure to Monitor for Non-Toxicity Requirements		
SECTION G: RECORDS AND REPORTS			
RECORDS AND REPORTS MAINTAINED AS REQUIRED BY PERMIT	☒ Yes	☐ No	☐ N/A
DETAILS:			
(a) ADEQUATE RECORDS MAINTAINED OF:			
SAMPLING DATE, TIME, EXACT LOCATION	☒ Yes	☐ No	☐ N/A
ANALYSES DATES, TIMES	☒ Yes	☐ No	☐ N/A
INDIVIDUAL PERFORMING ANALYSIS	☒ Yes	☐ No	☐ N/A
ANALYTICAL METHODS/TECHNIQUES USED	☒ Yes	☐ No	☐ N/A
ANALYTICAL RESULTS (e.g., consistent with self-monitoring report data)	☒ Yes	☐ No	☐ N/A
(b) MONITORING RECORDS (e.g., flow, pH, D.O., etc.) MAINTAINED FOR A MINIMUM OF THREE YEARS INCLUDING ALL ORIGINAL STRIP CHART RECORDINGS (e.g., continuous monitoring instrumentation, calibration and maintenance records)	☒ Yes	☐ No	☐ N/A
(c) LAB EQUIPMENT CALIBRATION AND MAINTENANCE RECORDS KEPT	☐ Yes	☐ No	☒ N/A
(d) FACILITY OPERATING RECORDS KEPT INCLUDING LOGS FOR EACH TREATMENT UNIT	☐ Yes	☐ No	☒ N/A
(e) QUALITY ASSURANCE RECORDS KEPT	☒ Yes	☐ No	☐ N/A
(f) RECORDS MAINTAINED OF MAJOR CONTRIBUTING INDUSTRIES (and their compliance status) USING PUBLICLY OWNED TREATMENT WORKS	☐ Yes	☐ No	☒ N/A
SECTION H: PERMIT VERIFICATION			
INSPECTION OBSERVATIONS VERIFY THE PERMIT	☒ Yes	☐ No	☐ N/A
DETAILS:			
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	☒ Yes	☐ No	☐ N/A
(b) FACILITY IS AS DESCRIBED IN PERMIT	☒ Yes	☐ No	☐ N/A
(c) PRINCIPAL PRODUCT(S) AND PRODUCTION RATES CONFORM WITH THOSE SET FORTH IN PERMIT APPLICATION	☐ Yes	☐ No	☒ N/A
(a) CORRECT NAME AND MAILING ADDRESS OF PERMITTEE	☒ Yes	☐ No	☐ N/A
(d) TREATMENT PROCESSES ARE AS DESCRIBED IN PERMIT APPLICATION	☐ Yes	☐ No	☒ N/A
(e) NOTIFICATION GIVEN TO EPA/STATE OF NEW, DIFFERENT OR INCREASED DISCHARGES	☐ Yes	☐ No	☒ N/A
(f) ACCURATE RECORDS OF RAW WATER VOLUME MAINTAINED	☐ Yes	☐ No	☒ N/A
(g) NUMBER AND LOCATION OF DISCHARGE POINTS ARE AS DESCRIBED IN PERMIT	☒ Yes	☐ No	☐ N/A
(h) CORRECT NAME AND LOCATION OF RECEIVING WATER	☒ Yes	☐ No	☐ N/A
(i) ALL DISCHARGES ARE PERMITTED	☒ Yes	☐ No	☐ N/A
Comments			

	PERMIT NO. DC0000248		
SECTION I: OPERATION AND MAINTENANCE			
TREATMENT FACILITY PROPERLY OPERATED AND MAINTAINED	☐ Yes	☐ No	☒ N/A
DETAILS:			
(a) STANDBY POWER OR OTHER EQUIVALENT PROVISIONS PROVIDED	☐ Yes	☐ No	☒ N/A
(b) ADEQUATE ALARM SYSTEM FOR POWER OR EQUIPMENT FAILURES AVAILABLE	☐ Yes	☐ No	☒ N/A
(c) REPORTS ON ALTERNATE SOURCE OF POWER SENT TO EPA/STATE AS REQUIRED BY PERMIT	☐ Yes	☐ No	☒ N/A
(d) SLUDGES AND SOLIDS ADEQUATELY DISPOSED	☐ Yes	☒ No[2]	☐ N/A
(e) ALL TREATMENT UNITS IN SERVICE	☐ Yes	☐ No	☒ N/A
(f) CONSULTING ENGINEER RETAINED OR AVAILABLE FOR CONSULTATION ON OPERATION AND MAINTENANCE PROBLEMS	☒ Yes	☐ No	☐ N/A
(g) QUALIFIED OPERATING STAFF PROVIDED	☒ Yes	☐ No	☐ N/A
(h) ESTABLISHED PROCEDURES AVAILABLE FOR TRAINING NEW OPERATORS	☐ Yes	☒ No[3]	☐ N/A
(i) FILES MAINTAINED ON SPARE PARTS INVENTORY, MAJOR EQUIPMENT SPECIFICATIONS, AND PARTS AND EQUIPMENT SUPPLIERS	☐ Yes	☐ No	☒ N/A
(j) INSTRUCTIONS FILES KEPT FOR OPERATION AND MAINTENANCE OF EACH ITEM OF MAJOR EQUIPMENT	☒ Yes	☐ No	☐ N/A
(k) OPERATION AND MAINTENANCE MANUAL MAINTAINED	☒ Yes	☐ No	☐ N/A
(l) SPCC PLAN AVAILABLE	☐ Yes	☐ No	☒ N/A
(m) REGULATORY AGENCY NOTIFIED OF BY-PASSING (Dates _____)	☐ Yes	☐ No	☒ N/A
(n) ANY BY-PASSING SINCE LAST INSPECTION	☐ Yes	☒ No	☐ N/A
(o) ANY HYDRAULIC AND/OR ORGANIC OVERLOADS EXPERIENCED	☐ Yes	☒ No	☐ N/A
SECTION J: COMPLIANCE SCHEDULES			
PERMITTEE IS MEETING COMPLIANCE SCHEDULE	☐ Yes	☒ No[3]	☐ N/A
CHECK APPROPRIATE PHASE(S): ☐ (a) THE PERMITTEE HAS OBTAINED THE NECESSARY APPROVALS FROM THE APPROPRIATE AUTHORITIES TO BEGIN CONSTRUCTION ☐ (b) PROPER ARRANGEMENT HAS BEEN MADE FOR FINANCING (mortgage commitments, grants, etc.) ☐ (c) CONTRACTS FOR ENGINEERING SERVICES HAVE BEEN EXECUTED ☐ (d) DESIGN PLANS AND SPECIFICATIONS HAVE BEEN COMPLETED ☐ (e) CONSTRUCTION HAS COMMENCED ☐ (f) CONSTRUCTION AND/OR EQUIPMENT ACQUISITION IS ON SCHEDULE ☐ (g) CONSTRUCTION HAS BEEN COMPLETED ☐ (h) START-UP HAS COMMENCED ☐ (i) THE PERMITTEE HAS REQUESTED AN EXTENSION OF TIME			
SECTION K: SELF-MONITORING PROGRAM			
PART 1: FLOW MEASUREMENT			
PERMITTEE FLOW MEASUREMENT MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT	☒ Yes	☐ No	☐ N/A
DETAILS:			
(a) PRIMARY MEASURING DEVICE PROPERLY INSTALLED	☒ Yes	☐ No	☐ N/A
TYPE OF DEVICE:			
☐ WEIR ☐ PARSHALL FLUME ☐ MAGMETER ☐ VENTURI METER ☒ OTHER (Specify: Automatic Sensor)			
(b) CALIBRATION FREQUENCY ADEQUATE (Date of last calibration May 2018)	☒ Yes	☐ No	☐ N/A
(c) PRIMARY FLOW MEASURING DEVICE PROPERLY OPERATED AND MAINTAINED	☒ Yes	☐ No	☐ N/A
(d) SECONDARY INSTRUMENTS (totalizers, recorders, etc.) PROPERLY OPERATED AND MAINTAINED	☐ Yes	☐ No	☒ N/A
(e) FLOW MEASUREMENT EQUIPMENT ADEQUATE TO HANDLE EXPECTED RANGES OF FLOW RATES	☒ Yes	☐ No	☐ N/A

	PERMIT NO. DC0000248		
PART 2: SAMPLING			
PERMITTEE SAMPLING MEETS THE REQUIREMENTS AND INTENT OF THE PERMIT	☒ Yes	☐ No	☐ N/A
DETAILS:			
(a) LOCATIONS ADEQUATE FOR REPRESENTATIVE SAMPLES	☒ Yes	☐ No	☐ N/A
(b) PARAMETERS AND SAMPLING FREQUENCY AGREE WITH PERMIT	☒ Yes	☐ No	☐ N/A
(c) PERMITTEE IS USING METHOD OF SAMPLE COLLECTION REQUIRED BY PERMIT	☒ Yes	☐ No	☐ N/A
IF NO, ☐ GRAB ☐ MANUAL COMPOSITE ☐ AUTOMATIC COMPOSITE	FREQUENCY		
(d) SAMPLE COLLECTION PROCEDURES ARE ADEQUATE	☒ Yes	☐ No	☐ N/A
(i) SAMPLES REFRIGERATED DURING COMPOSITING	☐ Yes	☐ No	☒ N/A
(ii) PROPER PRESERVATION TECHNIQUES USED	☐ Yes	☐ No	☒ N/A
(iii) FLOW PROPORTIONED SAMPLES OBTAINED WHERE REQUIRED BY PERMIT	☐ Yes	☐ No	☒ N/A
(iv) SAMPLE HOLDING TIMES PRIOR TO ANALYSES IN CONFORMANCE WITH 40CFR136.3	☐ Yes	☐ No	☒ N/A
(e) MONITORING AND ANALYSES BEING PERFORMED MORE FREQUENTLY THAN REQUIRED BY PERMIT	☐ Yes	☒ No	☐ N/A
(f) IF (e) IS YES, RESULTS ARE REPORTED IN PERMITTEE'S SELF-MONITORING REPORT	☐ Yes	☐ No	☒ N/A
PART 3: LABORATORY			
PERMITTEE LABORATORY PROCEDURES MEET THE REQUIREMENTS AND INTENT OF THE PERMIT	☐ Yes	☒ No	☒ N/A
DETAILS:			
(a) EPA APPROVED ANALYTICAL TESTING PROCEDURES USED (40 CFR 136.3)	☒ Yes	☐ No	☐ N/A
(b) IF ALTERNATE ANALYTICAL PROCEDURES ARE USED, PROPER APPROVAL HAS BEEN OBTAINED	☐ Yes	☐ No	☒ N/A
(c) PARAMETERS OTHER THAN THOSE REQUIRED BY THE PERMIT ARE ANALYZED	☐ Yes	☒ No	☒ N/A
(d) SATISFACTORY CALIBRATION AND MAINTENANCE OF INSTRUMENTS AND EQUIPMENT	☐ Yes	☒ No[4]	☐ N/A
(e) QUALITY CONTROL PROCEDURES USED	☐ Yes	☐ No	☒ N/A
(f) DUPLICATE SAMPLES ARE ANALYZED _____% OF TIME	☐ Yes	☐ No	☒ N/A
(g) SPIKED SAMPLES ARE USED _____% OF TIME	☐ Yes	☐ No	☒ N/A
(h) COMMERCIAL LABORATORY USED	☐ Yes	☐ No	☒ N/A
(i) COMMERCIAL LABORATORY STATE CERTIFIED	☐ Yes	☐ No	☒ N/A
LAB NAME LAB ADDRESS Tel.:			

Comments:

2. Screenings are collected in a trap that is emptied by facility employees into a commercial dumpster. The facility was unable to provide documentation of clean out and disposal of sediment collected in the wet well.

3. The facility did not meet the deadlines for the Thermal Plume study initially required by the permit but has since completed and submitted the study.

4. Maintenance for the pH and temperature monitoring equipment is conducted by Bond Technologies, Inc. which also provides a monthly report of sampling data. Despite multiple warnings from the contractor that influent sensors readings 'remained high' in August 2017 the equipment was not replaced until November 2017.

PERMIT NO. DC0000248

SECTION L: EFFLUENT/RECEIVING WATER OBSERVATIONS (Further explanation attached _____)

OUTFALL NO.	OIL SHEEN	GREASE	TURBIDITY	VISIBLE FOAM	VISIBLE FLOAT SOLIDS	COLOR	OTHER
001	None	None	Brownish water[5]	None	None	None	None

Comments:
5. Turbidity in the water was due to natural conditions and not attributed to the discharge from the facility.

(Sections M and N: Complete as appropriate for sampling inspections)

SECTION M: SAMPLING INSPECTION PROCEDURES AND OBSERVATIONS (Further explanation attached _____)

- ☐ GRAB SAMPLES OBTAINED
- ☐ COMPOSITE OBTAINED
- ☐ FLOW PROPORTIONED SAMPLE
- ☐ AUTOMATIC SAMPLER USED
- ☐ SAMPLE SPLIT WITH PERMITTEE
- ☐ CHAIN OF CUSTODY EMPLOYED
- ☐ SAMPLE OBTAINED FROM FACILITY'S SAMPLING DEVICE

COMPOSITING FREQUENCY _____.

PRESERVATION _____.

SAMPLE REFRIGERATED DURING COMPOSITING: ☐ YES ☐ NO ☒ N/A

SAMPLE REPRESENTATIVE OF VOLUME AND NATURE OF DISCHARGE: ☐ YES ☐ NO ☒ N/A

SECTION N: ANALYTICAL RESULTS (Attach report if necessary)

Water/NPDES Compliance Evaluation Inspection

The John F. Kennedy Center for the Performing Arts
2700 F Street NW,
Washington, DC 20566

NPDES Permit No. DC0000248

Inspection Date:	August 3, 2018
DOEE Representatives:	Robert Burnett Environmental Protection Specialist
	Isaac Kelley Environmental Protection Specialist
Facility Representatives:	Rodney Cherry Facility Manager
	Alexander Mensah Mechanic

1. Introduction

On August 3, 2018 inspectors from the Inspection and Enforcement Division of the Department of Energy and Environment (DOEE) conducted a National Pollutant Discharge Elimination System (NPDES) Compliance Evaluation Inspection (CEI) at the John F. Kennedy Center for the Performing Arts (the facility). The facility was inspected to determine the accuracy and reliability of the permittee's self-monitoring program and compliance with their NPDES permit. NPDES program and permits derive authority from the Clean Water Act (CWA).

DOEE Inspectors Burnett and Kelley reviewed records, interviewed site representatives, conducted an inspection tour of the facility, and completed EPA Form 3560-3 Water Compliance Inspection Report. The facility was represented by Mensah, Facility Mechanic and Rodney Cherry, Facility Manager. The weather at the time of inspection was clear with a temperature of approximately 80^{o} F.

2. Facility Description

The John F. Kennedy Center for the Performing Arts is located along the Potomac River just north of the Roosevelt Memorial Bridge **(Figure 1)**. The facility uses raw water from the Potomac River as non-contact cooling water for its air conditioning (A/C) system which is comprised of an open loop condenser and a closed loop chiller. The open loop condenser system uses water from the Potomac River to remove heat from the closed loop chiller system and discharges it back to the Potomac River. The chiller system consists of four chiller units and one plate and frame heat transfer system. The facility typically operates two chillers and the plate and frame system and keeps two chillers as backup. The facility's A/C system is maintained and operated 24 hours per day from May through September of each year, and as needed during the remainder of the year. The volume of water used is dependent on outside air temperature.

The facility's water intake point is located in the Potomac River and extends at an angle 40 feet out and 20 feet down to the middle of the river bed. The influent enters a screening/filtration process which consists of an initial settling chamber, a stationary screen to capture large debris **(Photo 1)**, a diversion wall that directs influent into one of two mud walls each containing one traveling screen to capture smaller debris, and a second set of mud walls. The influent is then combined in a second settling chamber where it is pumped through in-line filtration that captures debris and particulates larger than approximately 2cm.

The filtered non-contact cooling water flowing from the screening/filtration system is pumped to the mechanical room where it is used to cool one of four chiller units or the plate and frame system. After use, the water is typically returned to the Potomac River via Outfall No. 001. An automated thermally activated valve on the discharge pipe **(Photo 2)** redirects cooling water to the intake settling chamber and re-circulates it through the system if the water exceeds the maximum permitted temperature of 32.2 °C (89.9 °F) prior to discharge; the system is not equipped to recirculate water if the effluent is greater than the permitted 2.8 °C (5.04 °F) above influent temperature.

3. Records and Reports

Records and reports associated with the permit were reviewed during the inspection. Discharge Monitoring Reports (DMRs) and sampling data sheets from August 2016 to August 2018 were also reviewed. The facility began providing data electronically via the net-DMR system in October 2016. Facility staff stated initially there were some issues entering data electronically and they could not get sampling data into the system until September 2017. In addition to the effluent data, the influent temperature and pH are recorded from May to September; however, there is no location for this data in the net-DMR form for the other months. There was also some confusion at the facility regarding how to enter the data into net-DMR. The permit requires a daily

temperature monitoring requirement and a comparison between that number and the maximum allowed discharge temperature (influent +2.8 ^{o}C or 32.2 ^{o}C). This would require daily entries into net-DMR or the upload of a large number of data points each month for each parameter being measured and the system is not designed for this volume of data. The facility has been reporting the highest maximum temperature recorded and the highest maximum influent temperature recorded into the database for each month. Following discussions with EPA Region III it was decided this process should continue until the issue can be addressed in the next permit issuance. The tables below contain the pH and temperature effluent violations from the data reported during the inspection period.

Monitoring Period	Influent Value (^{o}C)	Effluent Value (^{o}C)	Temperature Difference	Permit Limit (Influent +2.8 ^{o}C or 32.2^{o}C)
June 2017	27	30.4	3.4	29.8
July 2017	28.7	31.7	3	31.5
September 2017	26.6	29.6	3	29.4
February 2018	None Entered	33.5	NA	32.2
May 2018	20.6	24.3	3.7	23.4

Monitoring Period	Permit Limit	Measured Value
August 2017	6.0 - 8.5	8.6
October 2017	6.0 - 8.5	8.6
November 2017	6.0 - 8.5	8.8
December 2017	6.0 - 8.5	9

The facility failed to conduct any analysis in the month of February 2017. In addition, the facility repeatedly reported data into net-DMR past the required deadline (the 28th day of the month following the month for which results are reported) in the months of: October 2017 (entered December 04), December 2017 (entered February 07), January 2018 (entered April 10), February (entered April 10), March (entered June 11), April (entered June 11), May 18 (entered August 03), and as of the writing of this report (September 19) had not entered data for June or July 2018.

4. Permit Verification

Non-contact cooling water discharged from facility Outfall 001 to the Potomac River is regulated by NPDES Permit No. DC0000248. The permit issued to the facility became effective on May 30th, 2013 and expired June 5th, 2018. The facility applied for permit renewal within EPA time requirements and the permit is currently administratively continued.

5. Operation and Maintenance

The plumbing (for both coolant and cooling water), screens, filters, and A/C units appeared to be in good working order. The inspectors did not see any leaks or spills at any of the unit processes involved in handling or discharging cooling water. Filters are backwashed into the initial settling chamber and sediment is allowed to settle out. The sediment and filters are reportedly vacuumed out by a contractor. During the 2016 inspection buckets of collected materials from an influent collection point clean-out remained onsite. The facility subsequently provided documentation showing Magnolia was contracted to perform maintenance in August 2015. Facility personnel stated that the contractor was scheduled to perform maintenance of the influent collection point again in August of 2018 and provided a photo of the hauling manifest to inspectors electronically following the email (**Photo 3**). Facility representatives also stated they are working to create a program for cleaning out the influent collection point with Kennedy Center personnel in the future. Facility

personnel again stated they are working to create a training program for operators. Despite multiple requests from inspectors, the facility failed to provide any training materials.

6. Compliance Schedules

Within one (1) year of the effective date of the initial permit, the permittee was to prepare and submit to EPA and DOEE a report, prepared by a qualified engineer or engineering firm, that shall (a) evaluate the reasons for recent and previous exceedances of temperature and (b) recommend corrective action to avoid future exceedances. The thermal plume study was completed in October 2013 and submitted to DOEE and EPA Region 3. The study found temperatures mixed and reverted to ambient within approximately 50 ft. of the discharge. It did not include any recommendations to avoid future exceedances.

7. Self-Monitoring Program

The facility is conducting its self-monitoring program in accordance with the Permit Part II, Section C.3, which requires that monitoring be conducted according to procedures approved under 40 CFR 136.

7.1 Flow Measurement

Flow measurements are collected via the Ecolab system which is part of the pH and temperature monitoring system. The program keeps real time measurements of outflows and intakes which can be monitored via computer.

7.2 Sampling

The facility does not have an on-site laboratory and does not collect samples for laboratory analytical testing. The permit requires the facility to monitor flow, temperature, and pH only. Monitoring is conducted with an effluent monitoring station located in the mechanical room **(Photo 4)**. The automatic system monitors influent and effluent at the point where water enters and exits the cooling system and takes readings every 2 hours. The effluent discharge pipe carries water from all four chiller units and the plate and frame system to Outfall 001. The meter is manufactured by ECOLAB® and was installed and is maintained by Bond Water Technologies, Inc. Maintenance includes downloading data, calibrating the monitoring equipment, and providing a printout of the data and calibrates the averages, maximums, and minimums of the monitoring data.

Bond Technologies report to the facility includes performance data and recommendations for the system. The earliest report received by inspectors from August 2017 stated that the influent sensors could not be calibrated and that readings 'remained high' implying that the problem has been ongoing for at least the previous report. The following months report stated that influent pH measurements could not be calibrated. In October, Bond reported that the sensors had failed. The facility did not replace the sensors until December of 2017 after effluent sensors had also failed. Influent and effluent measurements from August 2017 until January 2018 are possibly inaccurate and unreliable. This is further evinced by the facility reporting that influent pH measured 12 (which is a pH measurement that falls between household ammonia and household bleach and would be a very uncommon measurement for river water) multiple times during this period.

7.3 Laboratory

The facilities NPDES permit does not require samples that need laboratory evaluation. The pH and temperature data is maintained and collected by Bond Technologies.

8. Effluent and Receiving Waters

The receiving waters in the vicinity of Outfall 001 were observed to be free from visible contaminants such as foam, solids, oil sheens, or grease. The outfall is submerged in the middle of the river and is not directly visible **(Photo 5)**.

9. Past and Current Inspection Findings

9.1 Past Inspection Findings

2014 Inspection Findings:
A0012 – Numeric Effluent Violations (4 Temp)
C0015 – Frequency of sampling violation, (4 pH DMR omissions)
A0011 – Unapproved bypass (discharge of sludge and sediment during filter backwash)
C0011 – Failure to monitor for non-toxicity requirements (Influent temperature is not monitored)

2016 Inspection Findings
A0012 – Numeric effluent violations (6 Temp, 4 pH)
C0011 – Failure to monitor for non-toxicity requirements (not monitoring influent temperatures)
SEV B0020 – Improper Operation and Maintenance (no training program for operators)
The facility continues to have effluent violation issues. While the temperature plume study appeared to show effects of increased temperatures limited to within 50 feet of the outfall, there is no quantification of the potential effects of repeated pH violations. The system for remediating water for temperature and pH may need to be revisited to increase its efficacy.

The facility has failed to make changes instructed by Inspectors during previous inspections or has failed to provide documentation proving that these changes were made. This includes update DMR reporting to include influent temperature measurements and providing adequate documentation of a training program for operators.

9.2 Current Inspection Findings

9.2.1 A0012 Numeric Effluent Violations

Part I. Effluent Limitations and Monitoring Requirements
pH shall not be less than 6.0 standard units or greater than 8.5 standard units.
In accordance with DC WQS; not to exceed maximum daily value of 32.2^0 C and/or 2.8^0 C above ambient temperature at point of discharge.

The facility had 5 temperature (June, July, and September 2017; February and May 2018) and 4 pH (August, October, November, and December 2017) violations. There were multiple other exceedances reported of pH, however, the corresponding influent pH measurements were also above effluent requirements. Specific data can be seen in Tables 1 and 2 in section 3. Due to the unreliable nature of the influent data being recorded from the months of August 2017 through January 2018 the facility's statements that influent levels of pH being above permit requirements cannot be considered when evaluating the effluent levels.

9.2.2 C0017 Analysis Not Conducted

Part I. Effluent Limitations and Monitoring Requirements
The facility shall conduct continuously recorded temperature data and report daily for temperature and collect a grab sample 2x per month for pH.

The facility did not record or enter any data for February of 2018 due to a reported equipment malfunction.

9.2.3 SEV B0020 – Improper Operation and Maintenance

Part II. Standard Conditions for NPDES Permits
Section B. Operation and Maintenance of Pollution Controls
1. Proper Operation and Maintenance
The permittee shall at all times properly operate and maintain all facility and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance of this permit. Proper operation includes: effective performance; adequate funding; adequate operator staffing and training; and adequate laboratory and process controls, including appropriate quality assurance procedures.

The facility failed to properly maintain influent and effluent sensors recording pH. Despite recommendations and warnings from the contracting maintenance company (Bond Technologies) in monthly reports, the facility reported inaccurate data and waited until complete failure of the sensors to replace them. This has made influent pH data entered from July/August 2017 to January 2018 potentially inaccurate and unreliable.

9.2.4 E0011 Late Submittal of DMRs

Part II. Section C. Monitoring Procedures and Recordkeeping
5. Reporting of Monitoring Results
The permittee shall report monitoring results monthly, postmarked no later than the 28th day of the month following the month for which the results are reported.

The facility failed to enter data into net-DMR within a timely manner. Data was entered beyond the deadline in October and December 2017 and in January, February, March, April, and May of 2018. In addition, as of the writing of this report (September 19 2018) had not entered data for June or July 2018.

9.2.5 SEV B0020 – Improper Operation and Maintenance

Part II. Standard Conditions for NPDES Permits
Section B. Operation and Maintenance of Pollution Controls
1. Proper Operation and Maintenance
Proper operation and maintenance includes: effective performance; adequate funding; adequate operator staffing and training; and adequate laboratory and process controls, including appropriate quality assurance procedures.

The facility either does not have, or cannot provide proof of, an adequate training program for operators. Facility staff stated that they were between program managers and a program had not been put into effect. However, if an adequate program had been in place, then the changing of a facility manager or other staff should not render the training program non-existent.

10. Conclusions

The facility repeatedly enters sampling data late, ignores maintenance needs, and has made few attempts to properly address exceedances or provide proper training to staff. While the facility did install a new system to address sampling issues (after multiple requests for improvement from inspectors) they allowed the system to fall to disrepair and did not make repairs in a reasonable amount of time. Facility representatives generally require multiple attempts at contact from inspectors to provide requested information and generally do not show a good grasp of how the system works and what the permit requires.

Additionally, inspectors have identified an issue with data entry. Net-DMR does not allow for the volume of sampling data points required by facility's permit. Therefore, the facility is theoretically collecting a sample every 2 hours during normal operations resulting in 24 data points (influent and effluent) per day and more than 700 data points per month. This is not logistically feasible for the database's current configuration. The facility has been entering the highest recorded effluent temperature and the corresponding influent temperatures which would show overall exceedances but does not allow for assessment of the 2.8 degree temperature difference requirement. The facility was instructed to continue to enter data points as they have prior to this report but to also include the monthly data printout from the contractor in the future so regulators can ascertain true compliance statistics. The issue of what data to enter and how it should be entered will be addressed in the next permit.

GOVERNMENT OF THE DISTRICT OF COLUMBIA
Department of Energy & Environment

Natural Resources Administration
Inspection and Enforcement Division

Water/NPDES Compliance Inspection Photograph Log

The John F. Kennedy Center for the Performing Arts
2700 F Street NW,
Washington, DC 20566

NPDES Permit No. DC0000248

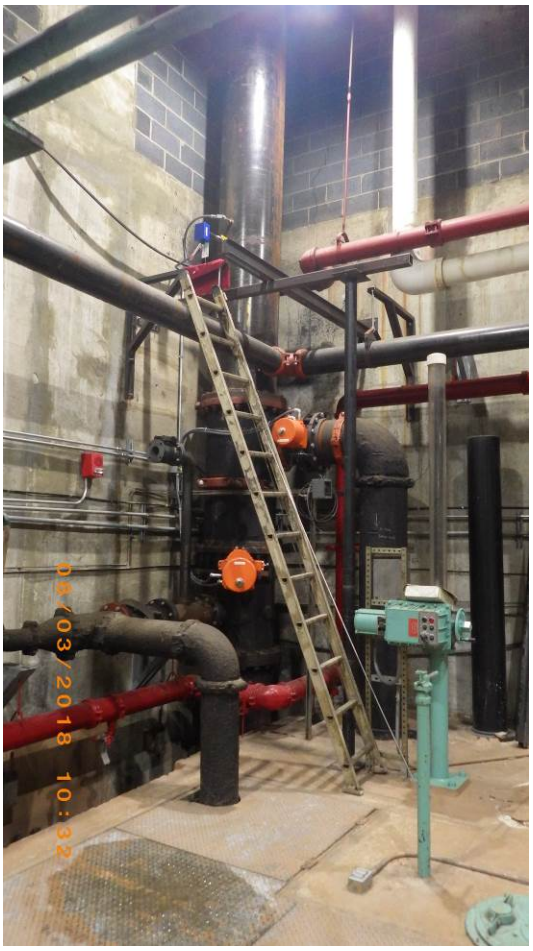
Inspection Date:	August 3, 2018
DOEE Inspectors:	Robert Burnett Environmental Protection Specialist
	Isaac Kelley Environmental Protection Specialist
Facility Representatives:	Rodney Cherry Facility Manager
	Alexander Mensah Mechanic

Figure 1. The John F. Kennedy Center for the Performing Arts located at 2700 F Street NW, Washington, DC 20566
Source: Google Earth DC.

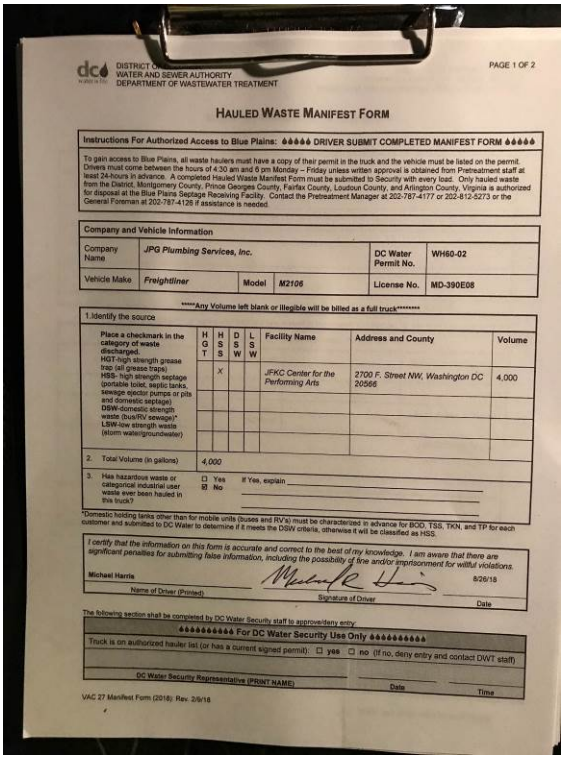
Inspection or Case File Name:		Case Number or Schedule ID:	
Facility Name:	Kennedy Center	**Facility Address:**	2700 F St NW

Photograph No. 1	
Photographer: Robert Burnett	
Inspection Date: 08/03/2018	
Direction:	
Description: Screening materials collecting in a basket in the electrical room.	

Inspection or Case File Name:		Case Number or Schedule ID:	
Facility Name:	Kennedy Center	**Facility Address:**	2700 F St NW

Photograph No. 2	
Photographer: Robert Burnett	
Inspection Date: 08/03/2018	
Direction:	
Description: Return valve and pipe used to recirculate water that is greater than the maximum effluent temperature.	

Inspection or Case File Name:		Case Number or Schedule ID:	
Facility Name:	Kennedy Center	**Facility Address:**	2700 F St NW

Photograph No. 3 **Photographer:** Robert Burnett **Inspection Date:** 08/03/2018 **Direction:** **Description:** Hauling manifest for sediment collected into the influent collection point.	

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY
DEPARTMENT OF WASTEWATER TREATMENT

PAGE 1 OF 2

HAULED WASTE MANIFEST FORM

Instructions For Authorized Access to Blue Plains: ♦♦♦♦♦ DRIVER SUBMIT COMPLETED MANIFEST FORM ♦♦♦♦♦

To gain access to Blue Plains, all waste haulers must have a copy of their permit in the truck and the vehicle must be listed on the permit. Drivers must come between the hours of 4:30 am and 6 pm Monday – Friday unless written approval is obtained from Pretreatment staff at least 24-hours in advance. A completed Hauled Waste Manifest Form must be submitted to Security with every load. Only hauled waste from the District, Montgomery County, Prince Georges County, Fairfax County, Loudoun County, and Arlington County, Virginia is authorized for disposal at the Blue Plains Septage Receiving Facility. Contact the Pretreatment Manager at 202-787-4777 or 202-812-5273 or the General Foreman at 202-787-4126 if assistance is needed.

Company and Vehicle Information

Company Name	JPG Plumbing Services, Inc.			DC Water Permit No.	WH60-02
Vehicle Make	Freightliner	Model	M2106	License No.	MD-390E08

*****Any Volume left blank or illegible will be billed as a full truck*********

1.Identify the source

Place a checkmark in the category of waste discharged. HGT-high strength grease trap (all grease traps) HSS- high strength septage (portable toilet, septic tanks, sewage ejector pumps or pits and domestic septage) DSW-domestic strength waste (bus/RV sewage)* LSW-low strength waste (storm water/groundwater)	HGT	HSS	DSW	LSW	Facility Name	Address and County	Volume
		X			JFKC Center for the Performing Arts	2700 F. Street NW, Washington DC 20566	4,000

2. Total Volume (in gallons) 4,000

3. Has hazardous waste or categorical industrial user waste ever been hauled in this truck? ☐ Yes ☒ No If Yes, explain _____

*Domestic holding tanks other than for mobile units (buses and RVs) must be characterized in advance for BOD, TSS, TKN, and TP for each customer and submitted to DC Water to determine if it meets the DSW criteria, otherwise it will be classified as HSS.

I certify that the information on this form is accurate and correct to the best of my knowledge. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment for willful violations.

Michael Harris — Name of Driver (Printed) — Signature of Driver — 5/26/18 Date

The following section shall be completed by DC Water Security staff to approve/deny entry

♦♦♦♦♦♦♦♦♦♦ For DC Water Security Use Only ♦♦♦♦♦♦♦♦♦♦

Truck is on authorized hauler list (or has a current signed permit): ☐ yes ☐ no (If no, deny entry and contact DWT staff)

DC Water Security Representative (PRINT NAME) — Date — Time

VAC 27 Manifest Form (2018): Rev. 2/9/18

Photograph No. 4 **Photographer:** **Inspection Date:** 08/03/2018 **Direction:** **Description:** Effluent discharge monitor showing a pH of 8.03 at the time of inspection.	

Inspection or Case File Name:		Case Number or Schedule ID:
Facility Name:	Kennedy Center	**Facility Address:** 2700 F St NW

Photograph No. 5	
Photographer: Robert Burnett	
Inspection Date: 08/03/2018	
Direction: South	
Description: Approximately location of the facility intake and discharge points to the Potomac River.